



## Memorandum

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Jennifer Jones, CDM Smith*  
*Christina M Gonzalez, CDM Smith*

*Date: March 28, 2016*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## Introduction

This memorandum summarizes the findings of biological monitoring on March 28, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:15 am and ending at 3:30 p.m. Weather conditions were mostly cloudy with a light sprinkle in the morning and winds picking up in the afternoon. Temperatures ranged from 58°F in the morning to 60°F in the afternoon. Overnight, there was no measureable rain.

During the daily monitoring, the biologist observed activities associated with setting the scaffolding and cement placing for the curbs on the Admiralty Way walking path, landscape work along the southern slope, the delivery of soil to the staging area in the parking lot, and installing of the fence throughout the Basin. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

## Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction gate is open and several crew members are in the construction parking lot.

6:25 am. The initial biological survey begins. The sky is cloudy and there is a light sprinkle, but not a measurable rain. A black-crowned night heron is standing near the tide gates on the gabion peninsula. A dark-eyed junco is heard calling from the trees. Two American coots stand at the bank of the northwest mudflat. House finches and house sparrows are heard in the palms along Washington. A second black-crowned night heron is perched in the wall of the stormwater outfall. A

great blue heron stands on the bank of the East Basin. An American crow forages on the southern slope of the southeast channel. Two American wigeons wade in the East Basin. Two mallards fly into the southeast channel. A second great blue heron is perched on the very top of one of the central pines. Fish are seen breaching the water in the southern portion of the Basin. An Allen's hummingbird flies between branches in the west pines. A third black-crowned night heron flies over the southeast channel. A double-crested cormorant swims in the West Basin.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. The monitor discussed the wildlife currently in the Basin, and instructed the crew to be mindful of monarchs, the change in behavior in the mating birds, and to be mindful if the birds get behind the silt fence.

7:05 am. Work begins. A snowy egret is perched on the berm. Planting continues on the southern slope of the Basin. Work on irrigation is done on the northern side of the Basin.

7:49 am. A great egret stands on the berm and the snowy egret, black-crowned night heron, and great blue heron move away. Three gulls fly west. A double-crested cormorant is seen flying toward the marina with nesting material. Two western gulls fly into the East Basin near two others who are on the berm. Several more begin to fly around the area. Two Canada geese fly over the Basin, but do not land. The snowy egret flies out of the Basin.

8:39 am. A snowy egret, great-blue heron, and great egret are on the berm near the tide gates.

8:51 am. The killdeer nest is observed near the tip of the westernmost peninsula. There are no killdeer on it. One killdeer is seen in the west mudflat and another walks along the bank of the Central Basin.

9:13 am. Two great egrets fly over the East Basin. One perches on the pine, the other lands on the slope. The one on the slope flies back to the gabion peninsula. Concrete is being placed for the curbing of the Admiralty Way walking path.

9:34 am. An Anna's hummingbird calls from the sign on the light post on Washington. A song sparrow is seen in the scrub mix of the West Basin catching flies. A killdeer is observed incubating the egg on the nest while the irrigation sprinklers are on.

10:31 am. A great blue heron at the end of the gabion peninsula dives and catches a fish. Two American coots and two mallards wade near the tide gates. A great blue heron is on the gabion peninsula nearby. Two more mallards and a double-crested cormorant are near the stormwater outfall. A killdeer continues to incubate its egg. Another pair of mallards are in the southeast channel.

10:56 am. An osprey flies over the Basin and catches a fish. A mourning dove flies into the scrub mix of the northeast peninsula.

11:08 am. The osprey is identified by its missing tail feather. An Anna's hummingbird perches on

Mr. Rick Sun  
March 28, 2016  
Page 3

the oak near the East Basin mudflat. Two mourning doves fly into the scrub mix of the northwest peninsula.

11:30 am. Crew breaks for lunch.

12:15 pm. Work resumes.

12:30 pm. The biologist walks toward the killdeer nest. A killdeer is flushed from the east side of the peninsula. It flies into the Central Basin. As the biologist approaches the nest, there is another killdeer nearby that begins to display the broken wing behavior. As the biologist walks away, the one by the nest flies into the Central Basin. Shortly after, the pair mate. They then continue to fly back between the West Basin and the nest.

1:00 pm. The biologist places buffer flagging across the peninsula north of the killdeer nest. Planting has been completed in this area and so the crew do not need to enter the area.

1:40 pm. As water is let into the Basin, one killdeer moves toward the nest. The other walks along the exposed areas of the Central Basin. A black phoebe is perched on the brick wall of the parking lot. A house finch is perched on the staged plants in front of the construction trailer. The great blue heron and great egret remain on the gabion peninsula. An Allen's hummingbird is in the pines near the tide gates.

2:10 pm. A bufflehead swims in the East Basin.

2:33 pm. Two mourning doves fly into the scrub mix of the West Basin. One killdeer is incubating the egg. Two mallards sleep on the gabion peninsula.

2:54 pm. A mourning dove flies into the pines next to the tide gates. A European starling is foraging in the plants near the privacy fence by the tide gate entrance. It flies up to the powerlines where it is joined by two more. All three fly away shortly thereafter.

2:29 pm. The great egret stands behind the silt fence and the great blue heron is now on a wooden plank over the west tide gate. A ground squirrel approaches but is scared away by the heron. Both birds return to the gabion peninsula.

3:08 pm. The great egret catches a fish and the great blue heron chases the egret away. The egret eats its fish in the shallow waters of the West Basin.

3:16 pm. An American crow forages in the ground near the pines by the tide gates.

3:30 pm. Work ends for the day. The gate is closed and all crew leave for the day.

## **Additional Observations**

One osprey was observed today. It was seen diving for food and eating on site. It was identified as the osprey previously seen with the missing tail feather.

No Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

Two killdeer were seen near the killdeer nest and in the nearby mudflats. The nest is located on the southern point of the northwest peninsula about midway between the top and the water level next to a blue ground marker. It currently has one egg. Flagging tape was placed at the top of the peninsula about 70 feet north of the nest.

No monarch butterflies were observed today by the biological monitor. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Planting on the southern slope occurred today.

## **Conclusions**

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. One osprey, identified by its missing tail feather, has been observed fishing in the Basin for several weeks. The time spent in the Basin and its aggressive behavior toward other osprey trying to fish in the Basin suggest this osprey is a resident and considers the Basin its territory.
3. The pair of killdeer have made a nest in the southern point of the northwest peninsula about midway between the top and the water level next to a blue ground marker. The nest currently has one egg. The pair were seen mating in the afternoon, which may indicate the possibility of nest abandonment. A buffer was placed about 70 feet north of the nest. Planting has been completed in the area so crew should not need to access the buffer area around the nest.
4. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
5. No construction activities occurred in the water.
6. The number of fish surfacing and caught by osprey and wading birds confirm that fish are



entering the Basin through the tide gates.

7. A ground squirrel was seen today. A burrow entrance was found under the pines near the tide gates further south.

**Table 1 provides a list of bird species observed during biological monitoring on March 28, 2016.**

<b>Table 1. Bird Species Observed during Biological Monitoring on March 28, 2016</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	Two individuals observed on the central and west mudflats and on the nest on the northwest peninsula
Ring-billed Gull	<i>Larus delawarensis</i>	Several individuals; Common flying overhead and standing in near the mudflats
Western Gull	<i>Larus occidentalis</i>	Three individuals in the Basin and several flying overhead
Snowy Egret	<i>Egretta thula</i>	2 individuals on the gabion peninsula
Great Blue Heron	<i>Ardea herodias</i>	3 individuals; perched on the gabion peninsula and flying overhead
Mallard	<i>Anas platyrhynchos</i>	4-6 individuals foraging throughout the Basin and flying overhead
American Wigeon	<i>Anas americana</i>	2-4 individuals foraging and resting in the Basin
American Coot	<i>Fulica americana</i>	Two individuals wading throughout the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	Several individuals in the palm trees and near the construction trailer.
Anna's Hummingbird	<i>Calypte anna</i>	Several individuals observed hovering overhead or perching throughout the Basin

Dark-eyed Junco	<i>Junco hyemalis</i>	Several individuals calling from trees across Admiralty
Bufflehead	<i>Bucephala albeola</i>	1 individual wading in the Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	Several individuals in the pines throughout the basin
European Starling	<i>Sturnus vulgaris</i>	3 individuals on the powerlines by the construction trailer
Osprey	<i>Pandion haliaetus</i>	1 individual diving throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	1-2 individuals flying overhead
Song Sparrow	<i>Melospiza melodia</i>	1 individual in the plants near the construction trailer
Mourning Dove	<i>Zenaida macroura</i>	Several individuals throughout the Basin
Great Egret	<i>Zenaida macroura</i>	1-2 individuals on the gabion peninsula
Canada Goose	<i>Branta Canadensis</i>	2 individuals flying overhead

Figures below summarizes the day's activities:



Planting along southern slope



Planting on southern slope further west





Killdeer nest on northwest peninsula just left of blue marker





Killdeer nest on northwest peninsula just left of blue marker



## **Memorandum**

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Jennifer Jones, CDM Smith  
Christina M Gonzalez, CDM Smith*

*Date: March 29, 2016*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## **Introduction**

This memorandum summarizes the findings of biological monitoring on March 29, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:15 am and ending at 3:30 p.m. Weather conditions were clear with light clouds and winds picking up in the afternoon. Temperatures ranged from 47°F in the morning to 60°F in the afternoon. Overnight, there was no measureable rain.

During the daily monitoring, the biologist observed activities associated with landscape work along the northern part of the southern slope, the delivery of soil to the staging area in the parking lot, and installing of the fence throughout the Basin, and electrical work throughout the Basin. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

## **Biologist's Field Log**

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction gate is open and several crew members are in the construction parking lot.

6:30 am. The initial biological survey begins. Two American coots are in the West Basin. A great blue heron stands on the gabion peninsula. Two black-crowned night herons are perched on the railing at the tide gates. Dark-eyed juncos and house finches are heard in the trees across Admiralty. A dark-eyed junco is perched on one of the central pines. An Anna's hummingbird hovers over the southeast channel. Two mallards wade in the Central Basin. One killdeer is on the east side of the northwest peninsula, the other is near the nest at the end of the peninsula. A snowy egret lands on

the tide gate railing and a black-crowned night heron moves to the southern bank. Two more black-crowned night herons chase each other.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Training covered the wildlife currently in the Basin, instructions to stay clear of the killdeer nest, and to pick up trash in the work areas.

7:23 am. As the work day begins, a killdeer is seen incubating the nest. Four black-crowned night heron, three snowy egrets, one great egret, and one great blue heron are on the gabion peninsula.

7:39 am. A double-crested cormorant swims in the West Basin.

8:15 am. A pair of mallards is in the parking lot near the construction trailer. A European starling perches on a lamp post on Washington. A house finch flies out of the staged trees in the parking lot. One killdeer is on the east side of the northwest peninsula. An Anna's hummingbird is perched on the oak tree nearby.

8:36 am. Two of the black-crowned night herons have moved to the stormwater outfall. An Anna's hummingbird is perched on a tree by the pump house. Workers install the fence along the bike path.

8:50 am. A crow is observed sitting in a nest in the fourth eucalyptus from parking lot 7 in the branch over the green house. Two mallards are wading near the boat ramp.

9:04 am. A snowy egret chases the female black-crowned night heron away from the berm. A killdeer is sitting on the nest on the northwest peninsula.

9:50 am. Two mallards fly into the West Basin.

10:14 am. An Anna's hummingbird is perched on the sign on the light post on Washington. Two great blue herons fly off the gabion peninsula and land on either side of the slopes of the southeast channel.

11:11 am. Two mourning doves are in the scrub mix on the north side of the Central Basin. They both fly into the mudflat. An American crow lands on the top of the northwest peninsula. The killdeer on the east calls and walks toward the nest. The other is near the nest but not incubating the egg. The biological monitor observes that the nest still contains one egg. Workers begin planting on the upper portion of the southern slope of the Basin.

11:50 am. Both the great blue heron and great egret catch fish while on the gabion peninsula. The killdeer is incubating its egg on the nest.

12:00 pm. Crew breaks for lunch.

12:45 pm. Work resumes. Crews continue planting on the southern slope as another crew installs electrical work along Admiralty. Another group of workers consolidate the soil in the staging area



in the parking lot.

1:00 pm. A pair of mallards and a pair of buffleheads sleep in the southern portion of the Basin. A great egret and a pair of sleeping mallards are on the gabion peninsula. A worker uses the rammer to compact the dirt near the tide gates.

1:17 pm. A house finch flies into the bushes by the construction trailer.

1:34 pm. Another pair of mallards wades near the stormwater outfall. A pair of American wigeons swims near the southeast channel.

1:47 pm. A black phoebe is perched on a wooden stake of the silt fence along the southeast channel. The American coots wade in the Central Basin.

2:00 pm. Both killdeer are seen in the northwest peninsula. The one closest to the nest flies into the Central Basin.

2:19 pm. A pair of mallards fly out of the Basin.

2:42 pm. Crews dig holes for the next set of plants on the southern slope of the Basin. A worker cleans up and bags the debris under the central pines.

2:52 pm. The great blue heron returns to the gabion peninsula. A snowy egret stands on the concrete wall near the tide gates.

3:11 pm. Two American crows forage in the scrub mix of the West Basin. Two more mallards fly into the Basin and stand on the wall of the stormwater outfall.

3:30 pm. Work ends for the day. The gate is closed and all crew leave for the day.

## **Additional Observations**

No Osprey, Black Skimmers, or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

Two killdeer were seen near the killdeer nest and in the nearby mudflats. The nest is located on the southern point of the northwest peninsula about midway between the top and the water level next to a blue ground marker. It currently has one egg. Flagging has been installed across the top of the peninsula about 70 feet north of the nest. Crews are instructed to stay out of the area.

No monarch butterflies were observed today by the biological monitor. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Planting on the southern slope occurred today.

A crows' nest along the bike path was observed throughout the day. One crow was observed sitting in the nest.

## Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. One osprey, identified by its missing tail feather, has been observed fishing in the Basin for several weeks. The time spent in the Basin and its aggressive behavior toward other osprey trying to fish in the Basin suggest this osprey is a resident and considers the Basin its territory.
3. The pair of killdeer have made a nest in the southern point of the northwest peninsula about midway between the top and the water level next to a blue ground marker. The nest currently has one egg. An avoidance buffer has been established with flagging across the top of the peninsula about 70 feet north of the nest.
4. In general, wildlife are most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
5. No construction activities occurred in the water.
6. The number of fish surfacing and caught by osprey and wading birds confirm that fish are entering the Basin through the tide gates.

**Table 1 provides a list of bird species observed during biological monitoring on March 29, 2016.**

<b>Table 1. Bird Species Observed during Biological Monitoring on March 29, 2016</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	Two individuals observed on the central and west mudflats and on the nest on the northwest peninsula
Ring-billed Gull	<i>Larus delawarensis</i>	Several individuals; Common flying overhead and standing in near the mudflats

Western Gull	<i>Larus occidentalis</i>	Several individuals flying overhead
Snowy Egret	<i>Egretta thula</i>	2 individuals on the gabion peninsula
Great Blue Heron	<i>Ardea herodias</i>	3 individuals; perched on the gabion peninsula and flying overhead
Mallard	<i>Anas platyrhynchos</i>	4-6 individuals foraging throughout the Basin and flying overhead
American Wigeon	<i>Anas americana</i>	2-4 individuals foraging and resting in the Basin
American Coot	<i>Fulica americana</i>	2 individuals wading throughout the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	Several individuals in the palm trees and near the construction trailer.
Anna's Hummingbird	<i>Calypte anna</i>	Several individuals observed hovering overhead or perching throughout the Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	1 individual seen in the central pines; Several individuals calling from trees across Admiralty
Bufflehead	<i>Bucephala albeola</i>	1 pair wading in the Basin
European Starling	<i>Sturnus vulgaris</i>	1 individual on the light post by the construction trailer
Osprey	<i>Pandion haliaetus</i>	1 individual diving throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	1 individual swimming in the Basin
Mourning Dove	<i>Zenaida macroura</i>	Several individuals throughout the Basin
Great Egret	<i>Zenaida macroura</i>	2 individuals on the gabion peninsula

Figures below summarizes the day's activities:



Figure 1 - Planting progress of southern slope



## **Memorandum**

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Jennifer Jones, CDM Smith  
Christina M Gonzalez, CDM Smith*

*Date: March 30, 2016*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## **Introduction**

This memorandum summarizes the findings of biological monitoring on March 30, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:15 am and ending at 3:45 p.m. Weather conditions were partly cloudy. Temperatures ranged from 47°F in the morning to 61°F in the afternoon. Overnight, there was no measureable rain.

During the daily monitoring, the biologist observed activities associated with the southern slope, installation of the fence, and electrical work throughout the Basin. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

## **Biologist's Field Log**

6:25 am. Biological monitor arrives on site to conduct initial assessment. The construction gate is closed and several crew members are in the parking lot. The biological monitor opens the gate and crew members come inside the construction area.

6:30 am. The initial biological survey begins. A black-crowned night heron is standing on the bank of the west mudflat. An American crow forages in the scrub mix of the West Basin. Both killdeer are at their nest. An Allen's hummingbird is in the east pine. Several warblers are heard in the eucalyptus by the pump house. Another crow's nest is found in a tree along the bike path, but it is not determined if it's an active nest. A dark-eyed junco forages next to the DG path by the boat ramp. Two mallards fly over the boat ramp toward the marina. A double-crested cormorant lands in the Basin and stands on the wall of the stormwater outfall. Four western gulls fly overhead. The two

American coots wade near the stormwater outfall. A black-crowned night heron flies into the pine by the tide gates. An Allen's hummingbird in the pine begins chattering aggressively. A snowy egret is perched on the wall of the tide gates.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Training covered the wildlife currently in the Basin, the killdeer nest, and mentioned the possibility of a hummingbird nest near the tide gates.

7:16 am. Work begins. A great egret and a great blue heron join the black-crowned night heron on the gabion peninsula. Two mallards stand on the bank of the West Basin.

8:15 am. A Caspian tern soars over the Basin and dives a couple of times for fish before flying west toward the marina. Two double-crested cormorants, one great blue heron, and a great egret stand on the stormwater outfall.

8:29 am. Two Anna's hummingbirds fly in the trees across the bike path from the east pine.

8:41 am. A pair of mallards flies into the southeast channel. A crow forages on the southern slope. No crows are seen in the nests by the pump house. A female black-crowned night heron is perched on the rocks of the pump house discharge outlet, it then flies east off site.

9:00 am. The great egret catches a fish from the gabion peninsula.

9:20 am. An osprey is perched on the powerline pole by the construction trailer eating its catch. Several crews fly overhead to get scraps. It then flies over to finish its meal on the Central Basin mudflat. Two double-crested cormorants are swimming in the West Basin and diving and catching fish.

9:38 am. Two great blue heron and a great egret stand on the gabion peninsula.

9:46 am. The osprey circles the Basin again. It is identified as the one with the missing tail feather. A killdeer forages on the east side of the northwest peninsula. An Anna's hummingbird is hovering nearby.

10:09 am. A pair of mallards and the pair of coots wade near the boat ramp. Another crows' nest is found in the second eucalyptus tree from parking lot 7 in the northeast branch. It is occupied.

10:31 am. The osprey returns. An Allen's hummingbird chatters in the pines near the tide gates.

10:46 am. An Allen's hummingbird's nest is found in the second pine from the tide gate approximately two feet down from the furthest north pointing branch. It chips as the biologist gets near but stays at the nest. The hummingbird seems tolerant of human activity occurring below the nest for short periods of time. When standing close for more than five minutes, the hummingbird flies toward the biologist in a possible attempt to move her away. As the biologist moved further back, the hummingbird went back into her nest.

11:25 am. The killdeer is seen incubating the egg on the nest at the tip of the northwest peninsula.

11:49 am. The osprey flies over the Basin and perches on the pine next to the tide gates. Two crows follow.

12:00 pm. Crew breaks for lunch.

12:45 pm. Work resumes. A snowy egret joins the great egret and the great blue heron.

1:00 pm. The Allen's hummingbird is in its nest in the pine next to the tide gates.

1:24 pm. A crow is seen in one of the nests behind the pump house. An Anna's hummingbird is perched on a tree by the pump house.

1:42 pm. Two double-crested cormorants and a pair of mallards are on the walls of the stormwater outfall. Crews continue to excavate near the top of the boat ramp first by hand, then using the mini excavator.

1:56 pm. One killdeer is foraging in the central mudflat; the other is walking around the southern portion of the peninsula leaving its egg exposed.

2:11 pm. Several house finches forage on the ground near the construction trailer. The osprey is perched on the pine closest to the tide gates.

2:20 pm. An American crow is perched on the powerline post near the construction trailer. A hooded merganser flies into the West Basin. Two monarch butterflies fly over the staged plants on the west edge. Several house sparrows are in a bush near the construction trailer.

2:50 pm. A second great blue heron comes into the Basin and chases the other. After circling the Basin a couple of times, one stays and the other remains. The Allen's hummingbird is still in its nest; it does not seem to be disturbed by the crows flying in, out, and around the tree. A bufflehead swims in the West Basin.

3:04 pm. A least sandpiper flies into the west mudflat. A western gull flies overhead near the soaring osprey but does not land.

3:20 pm. Perimeter flagging tape is placed around the pine with the Allen's hummingbird nest. The hummingbird is tolerant of the activity below, remaining on the nest. A black-crowned night heron is in the third pine from the tide gate and flies out as the workers approach. It lands on the gabion peninsula. A dark-eyed junco is perched on the gate leading into the tide gates.

3:45pm. Work ends for the day. The gate is closed and all crew leave for the day.

## **Additional Observations**

One Osprey was seen today. It has been identified as the one with the missing tail feather than has been seen for the past few weeks.

No Black Skimmers, or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

Two killdeer were seen at the killdeer nest and in the nearby mudflats. The nest is located on the southern point of the northwest peninsula about midway between the top and the water level next to a blue ground marker. It currently has one egg. A buffer was placed at the top of the peninsula about 70 feet north of the nest. There is no work activity near the nest

An Allen's hummingbird nest was found in the second pine from the tide gate. Perimeter tape was placed around the tree and tree was marked with red flagging tape. Crew were alerted to be cautious around the nest area.

Two monarch butterflies were observed today by the biological monitor. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Planting on the southern slope occurred today.

The crows' nests near the pump house were observed throughout the day with a sighting of a crow in one of them.

## **Conclusions**

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tend to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. One osprey, identified by its missing tail feather, has been observed fishing in the Basin for several weeks. The time spent in the Basin and its aggressive behavior toward other osprey trying to fish in the Basin suggest this osprey is a resident and considers the Basin its territory.
3. The pair of killdeer have made a nest in the southern point of the northwest peninsula about midway between the top and the water level next to a blue ground marker. The nest currently has one egg. A flagging tape buffer was placed about 70 feet north of the nest.
4. An Allen's hummingbird nest was found on the second pine from the tide gates. Perimeter



flagging was placed around the tree as well as flagging tape around the trunk. The hummingbird is very tolerant of human activities below the nest for short periods of time. The hummingbird sits in the nest for long periods of time, indicating she is incubating eggs. The flagging tape buffer was placed approximately 30 feet in each direction due to area constraints.

5. In general, wildlife are most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
6. No construction activities occurred in the water.
7. The number of fish surfacing and caught by osprey and wading birds confirm that fish are entering the Basin through the tide gates.

**Table 1 provides a list of bird species observed during biological monitoring on March 30, 2016.**

<b>Table 1. Bird Species Observed during Biological Monitoring on March 30, 2016</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	Two individuals observed on the central and west mudflats and on the nest on the northwest peninsula
Ring-billed Gull	<i>Larus delawarensis</i>	Several individuals; Common flying overhead and standing in near the mudflats
Western Gull	<i>Larus occidentalis</i>	Several individuals flying overhead
Snowy Egret	<i>Egretta thula</i>	2 individuals on the gabion peninsula
Great Blue Heron	<i>Ardea herodias</i>	3 individuals; perched on the gabion peninsula and flying overhead
Mallard	<i>Anas platyrhynchos</i>	4-6 individuals foraging throughout the Basin and flying overhead
American Coot	<i>Fulica americana</i>	2 individuals wading throughout the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	Several individuals in the palm

		trees and near the construction trailer.
Anna's Hummingbird	<i>Calypte anna</i>	Several individuals observed hovering overhead or perching throughout the Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	1 individual seen in the central pines; Several individuals calling from trees across Admiralty
Bufflehead	<i>Bucephala albeola</i>	1 pair wading in the Basin
Osprey	<i>Pandion haliaetus</i>	1 individual diving throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	3 individuals swimming in the Basin
Hooded Merganser	<i>Lophodytes cucullatus</i>	1 individual diving in the West Basin
Great Egret	<i>Zenaida macroura</i>	2 individuals on the gabion peninsula
Allen's hummingbird	<i>Selasphorus sasin</i>	Several individuals throughout the basin. A female is attending an active nest in the 2 <sup>nd</sup> pine by the tide gates
Caspian Tern	<i>Hydroprogne caspia</i>	One individual flying overhead and diving for fish

Figures below summarizes the day's activities:



Figure 1 – A crows' nest in the last eucalyptus from parking lot seven





Figure 2 – Allen's hummingbird in nest





Figure 3 – Location of hummingbird nest (tip of pen)





Figure 4 – Tree with trunk and branch flagged for Allen's hummingbird nest



Figure 5 – Panorama of Allen's hummingbird nest with buffer





Figure 6 – Nesting buffer facing west





## **Memorandum**

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Jennifer Jones, CDM Smith  
Christina M Gonzalez, CDM Smith*

*Date: March 31, 2016*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## **Introduction**

This memorandum summarizes the findings of biological monitoring on March 31, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:15 am and ending at 3:45 p.m. Weather conditions were clear. Temperatures ranged from 48°F in the morning to 63°F in the afternoon. Overnight, there was no measureable rain.

During the daily monitoring, the biologist observed activities associated with planting on the southern slope, installation of the fence, and electrical work throughout the Basin. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

## **Biologist's Field Log**

6:25 am. Biological monitor arrives on site to conduct initial assessment. The construction gate is closed and several crew members are in the parking lot. The biological monitor opens the gate and crew members come inside the construction area.

6:30 am. The initial biological survey begins. A black-crowned night heron and American crow are perched on the gabion peninsula near the tide gates. The Allen's hummingbird nest is vacant but a hummingbird flies around the tree and calls. Two American coots wade in the southern portion of the Basin. A double-crested cormorant swims in the East Basin. A crow calls from a eucalyptus by the boat ramp. There is no sight of a crow in any of the nests along the bike path. Warblers can be heard in the same trees. The cormorant flies out of the Basin due east. Four mallards swim in the East Basin. A great egret is perched on the gabion peninsula. Four American wigeon swim near the

stormwater outfall. Two more mallards wade in the West Basin.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Training covered the wildlife currently in the Basin, the active killdeer nest on the northwestern peninsula, and the Allen's hummingbird nest in the pine near the tide gates. The crew were instructed to be cautious if monarchs are near equipment.

7:54 am. Two double-crested cormorants are in the West Basin. The great egret stands on the bank of the west mudflat. Two mallards walk in the scrub mix of the West Basin. A black phoebe is perched on the privacy fence. The mallards fly into the southern portion of the basin. A great blue heron is on the gabion peninsula.

8:08 am. The killdeer nest is unoccupied. There is now a second egg. Both killdeer stand in the west mudflat.

8:13 am. A black-crowned night heron flies onto the wall near the stormwater outfall. A double-crested cormorant dries itself off on the wall of the stormwater outfall. Two crows chase each other on the northern slope. An Anna's hummingbird flies out of the pepper tree by the bike path in toward the Basin. A dark-eyed junco calls from the palm tree on the bike path. Two hummingbirds hover nearby. An Anna's hummingbird is perched on the pepper tree by the pump house. A worker cleans the area along the bike path in preparation for asphalt filling. Planting and irrigation work is done near the pump house. Fence work is being completed on the northern side of the Basin.

8:44 am. The Allen's hummingbird flies into its nest as the biologist approaches. One black-crowned night heron is perched on the railing of the tide gates, another is on the gabion peninsula with the great egret and great blue heron. Another Allen's hummingbird is calling from the pine closest to the tide gates. Three Canada geese fly into and wade in the southern portion of the Basin. Two crows forage on the northwest peninsula. One killdeer stands near the nest, the other remains on the west mudflat.

9:40 am. The great egret catches a fish in the southern portion of the Basin.

10:14 am. A mourning dove is perched on the privacy fence along the bike path.

10:27 am. The osprey returns to the Basin and dives for fish.

10:55 am. A snowy egret lands on the gabion peninsula.

11:19 am. Several house sparrows and house finches are in the bushes by the construction trailer. A black-crowned night heron flies into the third pine from the tide gate. One killdeer is near the nest.

11:30 am. House finches are perched on the palm fronds along Washington. A black-crowned night heron is walking in the East Basin. Concrete is being placed for the electrical work along the southeast channel. Tree swallows are seen flying in and out of the trees by the pump house.

12:00 pm. A European starling is perched on the light post by the construction trailer.

12:45 pm. Work resumes. The osprey is perched on the utility pole on the northwest peninsula. A monarch butterfly flies over the scrub mix of the West Basin. A bufflehead is diving in the West Basin. The osprey catches two fish but drops one in the west mudflat. A crow picks it up and takes it off site.

1:15 pm. A yellow Sulphur butterfly flies over the West Basin scrub mix. One killdeer is in the west mudflat; the other is approximately two feet from the nest. The one by the nest flies over by the one on the mudflat and they mate.

1:24 pm. A crow is seen in one of the nests behind the pump house. An Anna's hummingbird is perched on the pepper tree by the pump house.

1:45 pm. An Anna's hummingbird perches on the oak tree in the central scrub mix. Two mallards fly into the Basin.

2:05 pm. A black phoebe is perched on the silt fence on the southeast channel. Five gulls fly north overhead. Several crows are in the trees by the pump house. There are at least four nests in the trees along the bike path, but only one looks to be occupied.

2:25 pm. The three Canada geese remain in the West Basin. A double-crested cormorant dries itself in the west mudflat. The two American coots wade in the southern portion of the West Basin. The Allen's hummingbird is not in its nest, but quickly arrives as the biologist approaches. An American crow is foraging on the northwest peninsula. The killdeer begin to call, one is near the nest while the other is in the central mudflat.

2:45 pm. Two mourning doves are foraging on the ground near the tide gates and then perch on the west black fence. Two western gulls are perched on the end of the gabion peninsula.

3:09 pm. One of the western gulls is now in the northwest mudflat next to the cormorant. Four house sparrows are perched on the privacy fence near the gate by the tide gates. The Allen's hummingbird is in its nest. A second double-crested cormorant flies into the southern portion of the Basin. It joins the three geese, two mallards, and two coots. North of the berm is one double-crested cormorant, one great egret, and one great blue heron.

3:30 pm. Work ends for the day. The gate is closed and all crew leave for the day.

## **Additional Observations**

One Osprey was seen today. It has been identified as the one with the missing tail feather than has been seen for the past few weeks.

No Black Skimmers, or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

Two killdeer were seen near the killdeer nest and in the nearby mudflats. The nest is located on the southern point of the northwest peninsula about midway between the top and the water level next to a blue ground marker. A second egg was found in the nest today. An adult killdeer was often observed incubating the eggs while the other was nearby. A buffer was placed at the top of the peninsula about 70 feet north of the nest. No crew entered the buffer area.

An Allen's hummingbird nest is in the second pine from the tide gate. Perimeter tape is placed around the tree and tree was marked with red flagging tape. The female hummingbird appears to be incubating eggs and is not disturbed by workers walking nearby.

One monarch butterfly and one yellow Sulphur butterfly were observed today by the biological monitor. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Planting on the southern slope occurred today.

The crows' nests near the pump house were observed throughout the day with a sighting of a crow in one of them.

## Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. One osprey, identified by its missing tail feather, has been observed fishing in the Basin for several weeks. The time spent in the Basin and its aggressive behavior toward other osprey trying to fish in the Basin suggest this osprey is a resident and considers the Basin its territory.
3. The pair of killdeer have made a nest in the southern point of the northwest peninsula about midway between the top and the water level next to a blue ground marker. The nest currently has one egg. The pair were seen mating in the afternoon, which may indicate the possibility of nest abandonment. A buffer was placed about 70 feet north of the nest.
4. An Allen's hummingbird nest is on the second pine from the tide gates. A perimeter was placed around the tree as well as flagging tape around the trunk. The hummingbird is very tolerant of human activities below the nest for short periods of time. The hummingbird sits in the nest for long periods of time, indicating she is incubating eggs. A buffer was placed approximately 30



feet in each direction due to area constraints.

5. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
6. No construction activities occurred in the water.
7. The number of fish surfacing and caught by osprey and wading birds confirm that fish are entering the Basin through the tide gates.

**Table 1 provides a list of bird species observed during biological monitoring on March 31, 2016.**

<b>Table 1. Bird Species Observed during Biological Monitoring on March 31, 2016</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	Two individuals observed on the central and west mudflats and on an active nest on the northwest peninsula.
Ring-billed Gull	<i>Larus delawarensis</i>	Several individuals; Common flying overhead and standing in near the mudflats
Western Gull	<i>Larus occidentalis</i>	Several individuals flying overhead and two in the Basin
Snowy Egret	<i>Egretta thula</i>	1 individual on the gabion peninsula
Great Blue Heron	<i>Ardea herodias</i>	2 individuals; perched on the gabion peninsula and flying overhead
Mallard	<i>Anas platyrhynchos</i>	4-6 individuals foraging throughout the Basin and flying overhead
American Coot	<i>Fulica americana</i>	2 individuals wading throughout the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	Several individuals in the palm trees and near the construction trailer.
Anna's Hummingbird	<i>Calypte anna</i>	Several individuals observed

		hovering overhead or perching throughout the Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	1 individual near the bike path and on the privacy fence; Several individuals calling from trees across Admiralty
Osprey	<i>Pandion haliaetus</i>	1 individual diving throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	3 individuals swimming in the Basin
Canada Goose	<i>Branta canadensis</i>	3 individuals wading throughout the Basin
Great Egret	<i>Zenaida macroura</i>	2 individuals on the gabion peninsula
Allen's hummingbird	<i>Selasphorus sasin</i>	Several individuals throughout the basin. One active nest is in the second pine by the tide gates.
Black Phoebe	<i>Branta Canadensis</i>	2 individuals perched on the fence throughout the Basin.
European Starling	<i>Sturnus vulgaris</i>	1 individual perched on the light post near the construction trailer

Figures below summarizes the day's activities:



Figure 1 – Second egg in killdeer nest.



## **Memorandum**

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Jennifer Jones, CDM Smith*  
*Christina M Gonzalez, CDM Smith*

*Date: April 1, 2016*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## **Introduction**

This memorandum summarizes the findings of biological monitoring on April 1, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:15 am and ending at 3:45 p.m. Weather conditions were clear. Temperatures ranged from 54°F in the morning to 63°F in the afternoon. Overnight, there was no measureable rain.

During the daily monitoring, the biologist observed activities associated with planting on the southern slope, installation of fence posts, and irrigation valve work. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

## **Biologist's Field Log**

6:25 am. Biological monitor arrives on site to conduct initial assessment. The construction gate is open and several crew members are in the parking lot.

6:30 am. The initial biological survey begins. Three black-crowned night heron, a great egret, and a great blue heron are on the gabion peninsula. An Allen's hummingbird chatters and flies around the first pine from the tide gates. The Allen's hummingbird is in the nest in the second pine from the tide gates. Two American coots are in the southern part of the Central Basin. A double-crested cormorant swims out of the southeast channel into the East Basin. An Anna's hummingbird flies out of a eucalyptus tree by the pump house. Three black-crowned night heron and the great egret are standing near the stormwater outfall. One killdeer is near the nest on the western peninsula.



Mr. Rick Sun  
April 1, 2016  
Page 2

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Training covered the wildlife currently in the Basin, the killdeer nest, the Allen's hummingbird nest, the crows' nests, and mentioned to be cautious if monarchs are near equipment.

7:22 am. The European starling is perched on the transformer by the construction trailer. Five American crows fly around the west plant staging area and perch on the light post and powerline posts.

7:36 am. Two Cassin's kingbirds are in the palms along Washington. A crow chases them from tree to tree. A yellow-rumped warbler and black phoebe are in the east pine.

7:55 am. An Anna's hummingbird is perched in the pepper tree by the pump house. The great egret stands on the southeast channel. A male mallard swims in the East Basin.

8:35 am. The crew begins raking and hand digging in the area under the Allen's hummingbird's nest. The adult Allen's hummingbird is flitting about the tree.

9:02 am. Two double-crested cormorants are on the wall of the stormwater outfall. An Anna's hummingbird is perched on the pepper tree by the pump house. A Townsend's warbler is foraging on the flowers of the eucalyptus tree by the pump house.

9:16 am. Three tree swallows circle the trees along the bike path. Two black-crowned night herons fly into the east pine.

9:36 am. The osprey returns to the Basin and perches on the pine closest to the tide gates. Three great blue herons fly over the Basin. One lands on the gabion peninsula, the other two continue north. The female Allen's hummingbird is in her nest but flies away as the biologist approaches. She flies back in shortly after.

9:45 am. Three mourning doves are perched on the powerlines near the construction trailer.

10:05 am. Two mallards fly into the West Basin then fly up to the berm.

10:14 am. The Allen's hummingbird is still in her nest. A second one calls from the other pine before it flies away. A dark-eyed junco lands on the pine closest to the tide gates. A tractor comes near to deliver soil on the DG path, but the bird is not disturbed, remaining on the nest. Both killdeer are by the nest on the western peninsula.

10:32 am. A male mallard swims in the southeast channel. Two dark-eyed juncos forage on the DG path near the pump house. An American crow forages on the northeast peninsula.

10:55 am. Two song sparrows are perched on the powerlines near the construction trailer. One killdeer is incubating its eggs on the nest.

11:18 am. The osprey returns to the Basin and perches on the utility pole above the northwest

Mr. Rick Sun  
April 1, 2016  
Page 3

peninsula. A house finch is perched on the powerlines near the construction trailer. A black-crowned night heron flies in from the west and lands near the stormwater outfall. The Allen's hummingbird is not in its nest. The crews continue working underneath.

11:28 am. The Allen's hummingbird returns to her nest. Two hooded mergansers swim into the West Basin.

11:30 am. Crews break for lunch.

12:30 pm. Work resumes.

12:50 pm. Five European starlings are perched on the powerlines by the construction trailer. Several house sparrows and house finches are perched on the staged plants below. The Allen's hummingbird is in its nest as the workers dig below. One killdeer is incubating eggs on its nest.

1:13 pm. A monarch butterfly flies between plants by the southeast channel.

1:59 pm. A snowy egret is on the gabion peninsula with the great egret and black-crowned night heron. One killdeer flies off site. The great blue heron is on the west bank.

2:08 pm. The killdeer returns to the west mudflat. Four house finches are perched on the privacy fence near the tide gates. A cloudless Sulphur butterfly flies over the Basin into the grasses on the gabion peninsula.

2:16 pm. The Allen's hummingbird is not in its nest. The workers have moved their work closer to the tide gates. The hummingbird in the pine closest to the tide gates continues to call.

2:18 pm. The Allen's hummingbird returns to sit on its nest.

2:36 pm. A double-crested cormorant swims in the southeast channel.

2:57 pm. The killdeer is sitting on its eggs. Two mourning doves are perched on the powerlines near the construction trailer. A European starling is perched on the light post nearby.

3:05 pm. The great-blue heron flies south offsite. The osprey returns to the Basin, catches a fish and eats it on the central mudflat.

3:13 pm. The Allen's hummingbird is in its nest. A double-crested cormorant flies into the southern part of the West Basin.

3:30 pm. Work ends for the day. The gate is closed and all crew leave for the day.

## **Additional Observations**

One Osprey was seen today. It has been identified as the one with the missing tail feather than has been seen for the past few weeks.

No Black Skimmers, or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

Two killdeer were seen near the killdeer nest and in the nearby mudflats. The nest is located on the southern point of the northwest peninsula about midway between the top and the water level next to a blue ground marker. A second egg was found in the nest today. A buffer was placed at the top of the peninsula about 70 feet north of the nest. Crew did not enter the nest buffer area.

An Allen's hummingbird nest is in the second pine from the tide gate. Perimeter tape is placed around the tree and tree was marked with red flagging tape. The female is very tolerant of workers planting on the slope nearby.

One monarch butterfly and one cloudless Sulphur butterfly were observed today by the biological monitor. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Planting on the southern slope occurred today.

The crows' nests near the pump house were observed throughout the day with a sighting of a crow in one of them.

## **Conclusions**

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tend to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. One osprey, identified by its missing tail feather, has been observed fishing in the Basin for several weeks. The time spent in the Basin and its aggressive behavior toward other osprey trying to fish in the Basin suggest this osprey is a resident and considers the Basin its territory.
3. The pair of killdeer have made a nest in the southern point of the northwest peninsula about midway between the top and the water level next to a blue ground marker. A buffer was placed about 70 feet north of the nest. At the beginning of the week, the killdeer seemed to be tolerating the irrigation sprinklers, but by the end of the week the killdeer leave the nest while they are on.

4. An Allen's hummingbird nest is on the second pine from the tide gates. A perimeter was placed around the tree as well as flagging tape around the trunk. The hummingbird is very tolerant of human activities below the nest for short periods of time. The hummingbird sits in the nest for long periods of time, indicating she is incubating eggs. A buffer was placed approximately 30 feet in each direction due to area constraints.
5. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
6. No construction activities occurred in the water.
7. The number of fish surfacing and caught by osprey and wading birds confirm that fish are entering the Basin through the tide gates.

**Table 1 provides a list of bird species observed during biological monitoring on April 1, 2016.**

<b>Table 1. Bird Species Observed during Biological Monitoring on April 1, 2016</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	Two individuals observed on the central and west mudflats and on the nest on the northwest peninsula
Ring-billed Gull	<i>Larus delawarensis</i>	Several individuals; Common flying overhead and standing in near the mudflats
Western Gull	<i>Larus occidentalis</i>	Several individuals flying overhead and two in the Basin
Snowy Egret	<i>Egretta thula</i>	1 individual on the gabion peninsula
Great Blue Heron	<i>Ardea herodias</i>	2 individuals; perched on the gabion peninsula and flying overhead
Mallard	<i>Anas platyrhynchos</i>	4-6 individuals foraging throughout the Basin and flying overhead
American Coot	<i>Fulica americana</i>	2 individuals wading throughout the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard



House Sparrow	<i>Passer domesticus</i>	Several individuals in the palm trees and near the construction trailer.
Anna's Hummingbird	<i>Calypte anna</i>	Several individuals observed hovering overhead or perching throughout the Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	1 individual near the bike path and on the privacy fence; Several individuals calling from trees across Admiralty
Osprey	<i>Pandion haliaetus</i>	1 individual diving throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	3 individuals swimming in the Basin
Great Egret	<i>Zenaida macroura</i>	2 individuals on the gabion peninsula
Allen's hummingbird	<i>Selasphorus sasin</i>	Several individuals throughout the basin. One in the nest by the tide gates
Black Phoebe	<i>Sayornis nigricans</i>	1 individual in the east pine
European Starling	<i>Sturnus vulgaris</i>	Several individuals perched on the light post near the construction trailer
Yellow-rumped warbler	<i>Setophaga coronate</i>	1 individual in the east pine
Song Sparrow	<i>Melospiza melodia</i>	2 individuals on the powerlines by the construction trailer
Cassin's Kingbird	<i>Tyrannus vociferans</i>	2 individuals in the palms on Washington

Figures below summarizes the day's activities:



Figure 1 – Planting on southern slope near tide gates



## Memorandum

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Jennifer Jones, CDM Smith*  
*Christina M Gonzalez, CDM Smith*

*Date: April 2, 2016*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## Introduction

This memorandum summarizes the findings of biological monitoring on April 2, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:15 am and ending at 3:45 p.m. Weather conditions were clear. Temperatures ranged from 54°F in the morning to 70°F in the afternoon. Overnight, there was no measureable rain.

During the daily monitoring, the biologist observed activities associated with planting on the southern slope under the hummingbird nest, installation of fence posts, and irrigation valve work. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

## Biologist's Field Log

6:25 am. Biological monitor arrives on site to conduct initial assessment. The construction gate is open and several crew members are in the parking lot.

6:30 am. The initial biological survey begins. A great egret is perched on the railings of the tide gate. A snowy egret walks along the southern bank of the Basin. A great blue heron stands on the gabion peninsula. An Allen's hummingbird calls from the pine closest to the tide gates. The Allen's hummingbird is in her nest. Two American coots are wading in the Central Basin south of the berm. An Allen's hummingbird is flying between branches on a eucalyptus tree along the bike path. An American crow calls from the light post by the boat ramp. A crow can be seen in the nest above the green house along the bike path. Another crow is seen in the nest on the second eucalyptus tree from parking lot seven. An Anna's hummingbird is heard in the coral tree by the pump house. Five

black-crowned night heron are perched on the stormwater outfall. A dark-eyed junco can be heard from the trees across Admiralty Way. Three gulls fly north. The killdeer nest is occupied by one adult. There are still two eggs in the nest. An Anna's hummingbird is perched on the sign on the light post on Washington. A pair of mallards stand near the backflow device on the west end.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Training covered the wildlife currently in the Basin, the killdeer nest, the Allen's hummingbird nest, the crows' nests, and mentioned to be cautious if monarchs are near equipment.

7:53 am. The Allen's hummingbird is in her nest. Two workers rake under the pine closest to the tide gates. The Allen's hummingbird in the larger pine chases a black-crowned night heron off site. The crew continues to excavate near the boat ramp with the mini excavator.

8:18 am. A dark-eyed junco calls from a pepper tree along the bike path. A bufflehead swims in the Central Basin. A European starling is perched on a light post across Washington.

9:15 am. Both killdeer sit near the nest; one incubates the eggs. Two house sparrows are perched in the plants on the west edge of the Basin. The Allen's hummingbird is in the nest near the tide gates as workers dig holes for landscaping nearby. The hummingbird does not appear disturbed by the work nearby. One American wigeon swims in the Central Basin. A yellow-rumped warbler flies between branches of the eucalyptus along the bike path.

9:53 am. A snowy egret walks along the bank of the southeast channel. It spends the next few minutes walking closer to the workers but flies away as soon as the mechanical saw is in use. An Anna's hummingbird is perched on the pepper tree by the pump house.

10:10 am. Three house finches are perched on the construction trailer. Two mourning doves are perched on the powerlines near the construction trailer. A killdeer is sitting in its nest.

10:41 am. A great egret, snowy egret, black-crowned night heron, American crow and great blue heron are on the gabion peninsula. The Allen's hummingbird is in its nest. Workers continue digging below the tree. The hummingbird does not appear to be disturbed by the work. The other killdeer is on the east side of the northwest peninsula. Two mallards sleep on the stormwater outfall.

11:07 am. A European starling calls from a palm across Washington. An Anna's hummingbird is perched on an oak tree by the northwest peninsula. A mourning dove flies on site and perches on the powerlines about the northwest peninsula.

11:18 am. A monarch butterfly flies over the staged plants along the West Basin.

11:45 am. Crews break for lunch.

12:30 pm. Work resumes.



Mr. Rick Sun  
April 2, 2016  
Page 3

12:55 pm. There are now three eggs in the killdeer nest. The bufflehead is in the Central Basin. A double-crested cormorant and two mallards sleep on the wall of the stormwater outfall.

1:15 pm. An American crow is in the nest above the green house along the bike path.

1:28 pm. The Allen's hummingbird is in her nest.

1:50 pm. A snowy egret flies over the southeast channel. Crews begin digging below the central pines.

2:07 pm. Two European starlings are perched on the utility pole near the construction trailer. A killdeer is sitting on its nest. Another European starling forages in the scrub mix of the West Basin.

2:13 pm. The great blue heron catches a fish off the gabion peninsula and eats it off the West Bank. An American crow is perched on the pine closest to the tide gates. Three house finches and a European starling are foraging on the staged plants on the west end. An American crow is on the northwest peninsula. The two killdeer are near the nest. One flies to the west mudflat as the biological monitor comes near.

2:35 pm. The bufflehead swims in the East Basin. An Anna's hummingbird is perched on the pepper tree by the pump house.

2:50 pm. A black-crowned night heron flies over the southeast channel into the Basin.

3:02 pm. A double-crested cormorant swims in the West Basin. One house sparrow and four house finches are perched on the privacy fence by the tide gates.

3:13 pm. An American crow is lured away from the killdeer nest by one of the killdeer. They both fly out into the West Basin. The crow flies offsite. Both killdeer are now in the West Mudflat.

3:30 pm. Work ends for the day. The gate is closed and all crew leave for the day.

## **Additional Observations**

No Osprey, Black Skimmers, or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed either.

Two killdeer were seen near the killdeer nest and in the nearby mudflats. The nest is located on the southern point of the northwest peninsula about midway between the top and the water level next to a blue ground marker. A third egg was found in the nest today. A buffer was placed at the top of the peninsula about 70 feet north of the nest. No crew entered the buffer area.

An Allen's hummingbird nest is in the second pine from the tide gate. Work occurred below with hand tools. The hummingbird is very tolerant of the activity, remaining on the nest.

One monarch butterfly was observed today by the biological monitor. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Planting on the southern slope occurred today.

The crows' nests near the pump house were observed throughout the day with a sighting of a crow in one of them.

## Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. One osprey, identified by its missing tail feather, has been observed fishing in the Basin for several weeks. The time spent in the Basin and its aggressive behavior toward other osprey trying to fish in the Basin suggest this osprey is a resident and considers the Basin its territory.
3. The pair of killdeer have made a nest in the southern point of the northwest peninsula about midway between the top and the water level next to a blue ground marker. The nest currently has three eggs. A buffer was placed about 70 feet north of the nest. At the beginning of the week, the killdeer seemed to be tolerating the irrigation sprinklers, but by the end of the week the killdeer leave the nest while they are on.
4. An Allen's hummingbird nest is on the second pine from the tide gates. A perimeter was placed around the tree as well as flagging tape around the trunk. The hummingbird is very tolerant of human activities below the nest for short periods of time. The hummingbird sits in the nest for long periods of time, indicating she is incubating eggs.
5. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
6. No construction activities occurred in the water.
7. The number of fish surfacing and caught by osprey and wading birds confirm that fish are entering the Basin through the tide gates.

**Table 1 provides a list of bird species observed during biological monitoring on April 2, 2016.**

<b>Table 1. Bird Species Observed during Biological Monitoring on April 2, 2016</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	Two individuals observed on the central and west mudflats and on the nest on the northwest peninsula.
Ring-billed Gull	<i>Larus delawarensis</i>	Several individuals; Common flying overhead and standing in near the mudflats
Western Gull	<i>Larus occidentalis</i>	Several individuals flying overhead and two in the Basin
Snowy Egret	<i>Egretta thula</i>	1 individual on the gabion peninsula
Great Blue Heron	<i>Ardea herodias</i>	2 individuals; perched on the gabion peninsula and flying overhead
Mallard	<i>Anas platyrhynchos</i>	2 individuals foraging throughout the Basin and flying overhead
American Coot	<i>Fulica americana</i>	2 individuals wading throughout the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	Several individuals in the palm trees and near the construction trailer.
Anna's Hummingbird	<i>Calypte anna</i>	Several individuals observed hovering overhead or perching throughout the Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	1 individual near the bike path; Several individuals calling from trees across Admiralty
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	2 individuals swimming in the Basin
Great Egret	<i>Zenaida macroura</i>	1 individual on the gabion peninsula and walking along banks
Allen's hummingbird	<i>Selasphorus sasin</i>	Several individuals throughout the basin. One in the nest by the tide gates.

Mr. Rick Sun  
April 2, 2016  
Page 6

European Starling	<i>Sturnus vulgaris</i>	Several individuals perched on the light post near the construction trailer
Black-crowned night heron	<i>Nycticorax nycticorax</i>	5 individuals throughout the Basin.
Yellow-rumped warbler	<i>Setophaga coronate</i>	1 individual in the eucalyptus by the pump house
Bufflehead	<i>Nycticorax nycticorax</i>	1 individual throughout the Basin